

# Claims

- [c1] An apparatus to record hits to a contestant engaged in sparring with another contestant, said apparatus comprising:
- a first item of clothing having at least one first electrically conductive strip and at least one second electrically conductive strip, wherein at least one said first electrically conductive strip is adjacent to at least one said second electrically conductive strip;
  - a voltage receiving mechanism, having a first lead and a second lead, wherein said first lead is electrically connected to said at least one first electrically conductive strip and said second lead is electrically connected to said at least one second electrically conductive strip;
  - a second item of clothing, having at least one electrically conductive portion, which can electrically connect at least one said first electrically conductive strip and at least one said second electrically conductive strip of said first item of clothing when said at least one electrically conductive portion of said second item of clothing is in contact with said first item of clothing; and
  - an indicating device that is electrically connected to said at least one first electrically conductive strip and said at

least one second electrically conductive strip and provides an indication when said at least one electrically conductive portion of said second item of clothing electrically connects at least one said first electrically conductive strip and at least one said second electrically conductive strip of said first item of clothing, which occurs when said second item of clothing is in contact with said first item of clothing.

- [c2] The apparatus of claim 1, wherein said first item of clothing is selected from the group consisting of a vest, a facemask and headgear.
- [c3] The apparatus of claim 1, wherein said second item of clothing is selected from the group consisting of at least one boot and at least one glove.
- [c4] The apparatus of claim 1, wherein said indicating device includes an audio alarm.
- [c5] The apparatus of claim 4, wherein said audio alarm includes a buzzer.
- [c6] The apparatus of claim 1, further including a D.C. battery, having a first terminal and a second terminal, wherein said first terminal is electrically connected to said first lead of said voltage receiving mechanism and said second terminal is electrically connected to said

second lead of said voltage receiving mechanism.

[c7] The apparatus of claim 1, wherein said at least one first electrically conductive strip includes a plurality of first electrically conductive strips and said at least one second electrically conductive strip includes a plurality of second electrically conductive strips, which are formed into at least one electrically independent target region.

[c8] The apparatus of claim 7, wherein said at least one electrically independent target region for a vest is selected from the group consisting of a torso, an abdomen, a groin, a right lateral trunk and a left lateral trunk.

[c9] The apparatus of claim 7, wherein said at least one target region for a headgear is selected from the group consisting of a face, a back of a head, a right side of a head, a left side of a head and a top of a head.

[c10] The apparatus of claim 3, wherein said at least one electrically conductive portion for said at least one boot is selected from the group consisting of a top of an instep, a top of a posterior heel, a bottom of a ball of foot and a bottom of a plantar heel.

[c11] The apparatus of claim 3, wherein said at least one electrically conductive portion for said at least one glove is selected from the group consisting of a back of a fist, a

front of a fist, a radial side of a hand and an ulnar side of a hand.

[c12] The apparatus of claim 1, at least one first electrically conductive strip includes a plurality of first conductive strips connected to the first lead for the voltage receiving mechanism, having a first polarity, and the at least one second electrically conductive strip includes a plurality of second conductive strips connected to the second lead for the voltage receiving mechanism, having a second polarity, wherein at least one first conductive strip is transverse to another first conductive strip of the plurality of first conductive strips and electrically connected to each other and at least one second conductive strip of the plurality of second conductive strips is transverse to at least one first conductive strip of the plurality of first conductive strips and is electrically insulated therefrom.

[c13] An apparatus to record hits to a contestant engaged in sparring with another contestant, said apparatus comprising:  
a first item of clothing having at least one first electrically conductive strip and at least one second electrically conductive strip, wherein at least one said first electrically conductive strip is adjacent to at least one said second electrically conductive strip;

a voltage receiving mechanism, having a first lead and a second lead, wherein said first lead is electrically connected to said at least one first electrically conductive strip and said second lead is electrically connected to said at least one second electrically conductive strip;

a second item of clothing, having at least one electrically conductive portion, which can electrically connect at least one said first electrically conductive strip and at least one said second electrically conductive strip of said first item of clothing, which occurs when said at least one electrically conductive portion of said second item of clothing is in contact with said first item of clothing;

a first indicating device that is electrically connected to said at least one first electrically conductive strip and said at least one second electrically conductive strip and provides an indication when said electrically conductive portion of said second item of clothing electrically connects at least one said first electrically conductive strip and at least one said second electrically conductive strip of said first item of clothing, which occurs when said second item of clothing is in contact with said first item of clothing; and

a first transmitter that is electrically connected to at least one said first electrically conductive strip and at least one said second electrically conductive strip and transmits an indication when said electrically conductive por-

tion of said second item of clothing electrically connects at least one said first electrically conductive strip and at least one said second electrically conductive strip of said first item of clothing, which occurs when said second item of clothing is in contact with said first item of clothing.

[c14] The apparatus of claim 13, further including a first receiver that receives said indication from said first transmitter that indicates when said electrically conductive portion of said second item of clothing electrically connects at least one said first electrically conductive strip and at least one said second electrically conductive strip of said first item of clothing, which occurs when said second item of clothing is in contact with said first item of clothing.

[c15] The apparatus of claim 14, wherein said first receiver is electrically connected to a second indicating device.

[c16] The apparatus of claim 15, wherein said second indicating device includes a processor connected to said first receiver and at least one input device that is capable of altering input from said first receiver and a first electronic display connected to said processor.

[c17] The apparatus of claim 16, wherein said first electronic

display is selected from the group consisting of an incandescent light array display, a light emitting diode display, a cathode ray tube display, a liquid crystal diode display and a plasma tube display.

[c18] The apparatus of claim 16, wherein said processor is connected to a second transmitter that sends a signal to a second receiver that is connected to a second electronic display.

[c19] The apparatus of claim 18, wherein said second electronic display is selected from the group consisting of an incandescent light array display, a light emitting diode display, a cathode ray tube display, a liquid crystal diode display and a plasma tube display.

[c20] The apparatus of claim 16, wherein said at least one input device is capable of providing functions selected from the group consisting of turning said processor on and off, awarding points, awarding partial points, correcting errors, paging through memory of said processor, resetting said processor, providing a warning and stopping a timing sequence.

[c21] The apparatus of claim 16, wherein said first electronic display can display output from the group consisting of time remaining in a competition, a digital score for a first



contestant, a weapon icon for said first contestant, an alphabetic representation for a weapon for said first contestant, a target icon for said first contestant, a time when said first contestant has been hit, a digital score for a second contestant, a weapon icon for said second contestant, an alphabetic representation for a weapon for said second contestant, a target icon for said second contestant, a time when a second contestant has been hit.

[c22] A method to record hits to a contestant engaged in sparring with another contestant, said method comprising: contacting a first item of clothing with a second item of clothing, wherein said first item of clothing includes at least one first electrically conductive strip and at least one second electrically conductive strip, wherein at least one said first electrically conductive strip is adjacent to at least one said second electrically conductive strip and there is a voltage receiving mechanism, having a first lead and a second lead, wherein said first lead is electrically connected to said at least one first electrically conductive strip and said second lead is electrically connected to said at least one second electrically conductive strip and said second item of clothing includes at least one electrically conductive portion that can electrically connect at least one said first electrically conductive strip



and at least one said second electrically conductive strip of said first item of clothing when said at least one electrically conductive portion of said second item of clothing is in contact with said first item of clothing; and providing an indication with an indicating device that is electrically connected to said at least one first electrically conductive strip and said at least one second electrically conductive strip when said at least one electrically conductive portion of said second item of clothing electrically connects at least one said first electrically conductive strip and at least one said second electrically conductive strip of said first item of clothing, which occurs when said second item of clothing is in contact with said first item of clothing.

[c23] The method of claim 22, wherein said first item of clothing is selected from the group consisting of a vest and a headgear and said second item of clothing is selected from the group consisting of at least one glove and at least one boot.

[c24] A method to record hits to a contestant engaged in sparring with another contestant, said method comprising: contacting a first item of clothing with a second item of clothing, wherein said first item of clothing includes at least one first electrically conductive strip and at least one second electrically conductive strip, wherein at least

one said first electrically conductive strip is adjacent to at least one said second electrically conductive strip and there is a voltage receiving mechanism, having a first lead and a second lead, wherein said first lead is electrically connected to said at least one first electrically conductive strip and said second lead is electrically connected to said at least one second electrically conductive strip and said second item of clothing includes at least one electrically conductive portion that can electrically connect at least one said first electrically conductive strip and at least one said second electrically conductive strip of said first item of clothing when said at least one electrically conductive portion of said second item of clothing is in contact with said first item of clothing; providing an indication with an indicating device that is electrically connected to said at least one first electrically conductive strip and said at least one second electrically conductive strip when said at least one electrically conductive portion of said second item of clothing electrically connects at least one said first electrically conductive strip and at least one said second electrically conductive strip of said first item of clothing, which occurs when said second item of clothing is in contact with said first item of clothing; and transmitting an electronic indication with a first transmitter that is electrically connected to at least one said

first electrically conductive strip and at least one said second electrically conductive strip when said electrically conductive portion of said second item of clothing electrically connects at least one said first electrically conductive strip and at least one said second electrically conductive strip of said first item of clothing, which occurs when said second item of clothing is in contact with said first item of clothing.

[c25] The method of claim 24, further includes receiving an indication with a first receiver on a second indicating device from said first transmitter that indicates when said electrically conductive portion of said second item of clothing electrically connects at least one said first electrically conductive strip and at least one said second electrically conductive strip of said first item of clothing, which occurs when said second item of clothing is in contact with said first item of clothing.

[c26] The method of claim 25, further includes altering input received from said first receiver with at least one input device connected to a processor, wherein said processor is connected to said first receiver and a first electronic display.

[c27] The method of claim 26, further includes sending a signal to a second receiver that is connected to a second

electronic display sent from a second transmitter that is connected said processor.